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## FLEET **LOGISTICS SUPPORT** IMPROVEMENT **CONFERENCE**

## **SOFTWARE** CONFIGURATION

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## **BACKGROUND**

- Need for a Navy Wide System to track Software Configurations
- NAVSEA 04L has CM Policy/Process responsibility
- CDMD-OA is the mandated CM repository for NAVSEA
- NAVSEA 04L developed policy/procedures & prototyped
  - TR01 Battle Force



## REQUIREMENT

Accurate and comprehensive software configuration is essential to facilitate interoperability assessments, determine unit capabilities, and ensure appropriate training and support.

CDMD-OA is the NAVSEA mandated configuration recording tool



## NAVSEA 04L

- Established process using CDMD-OA
  - Met with SSAs, ISEAs, CDMs, Program Managers and programmers
  - Developed initial software CM process
    - Defined CDMD-OA data elements to be used
    - Determined Record Types 2, 3 and 4 to be used
    - Reviewed process with programmers and SSAs/ISEAs/CDMs
    - Generated sample records to test process
    - Verified edit checks and formatted data entries (in use)



## NAVSEA 04L

- Implemented software CM process on a limited basis Discussed limited implementation
  - Decision prototype to test process
  - Software CM Workshop PHD NSWC
  - Kicked off Prototype
  - Collected data on software CM prototype systems
    - 169 records on 25 systems on 11 ships to date
      - » Records without Software Identification Numbers 66
    - 1800 other software records also in system
    - Software Identification Number Average length 7 characters



### **PROCESS**

- Use CDMD-OA RT2, RT3, and RT4 records
  - RT2 for software versions RT3 Logistics Support Documentation and more then one media installation - RT4 for patches or future versions
  - Expanded some data elements to record software version data
  - Assign X-RICs for software records
  - Associate software with system / hardware
  - Use DISCPL code of "V" for software, and SAC of "SWFTR" Record media type and serial number



### **PROCESS**

#### Ability to:

- Sort CDMD-OA for software records only
- Generate NAVSEA 53 requested report of installed software
- Generate VALAIDS for software validation
  - FLTILOLANT Validated Prototype Ships & VALAID



## **OTHER RECORDS**

- NAVICP software RICS
  - Some systems are using NAVICP generated RICs for recording software configurations
  - Modification of NAVICP generated RICs allows data to be used
    - SAC = "SWFTR" and DISCPL = "V" will ID software records
    - PRID Media, SN Serial Number, and Parent System.
    - EIN = Software Version ID Number



## **LESSONS LEARNED**

- 1. NAVICP RIC/CDMD-OA XRIC DATA FIELDS Some of the data fields did not follow requirements.
  - **Solution:** Education by phone calls and emails AND updating Enterprise Documentation and putting out the Users Guide
- **2. REDUNDANT DATA ENTRY -** Prototype has flushed out un-necessary data entry duplication.
  - **Solution:** Eliminate SW identification number in CCF. Eliminate the word 'software' at the beginning of EIN field and Nomenclature field.



## **LESSONS LEARNED**

- 3. NHA RIC/RIN vs Parent RIC/RIN Conflict which to use and what actually falls out on the VAL AID.
  - **Solution**: Use the Parent RIC/RIN data fields to tie to the hardware. Works for both the configuration record (RT2) and the VAL AID Report.
- **4. Record Type 2 Data -** Parent RIC and Parent Serial Number are not always loaded on RT 2.
  - **Solution**: Must be sure the CDM includes the Parent RIC and the Parent Serial Number in the final Record Type 2 in CDMD-OA.



## **LESSONS LEARNED**

• **ISEA Process** – works.

• **CDM Process** - works.

• Validation Process - works.

• Average Length of ID Numbers – 7 (Seven).



## **STATUS**

- XRICs manually issued
- Incorporating NAVICP records
- Successful initial validation of ships has been performed
- Currently redrafting NAVSEANOTE 4130 Requirements
  - Will promulgate for review/adjudication/signature

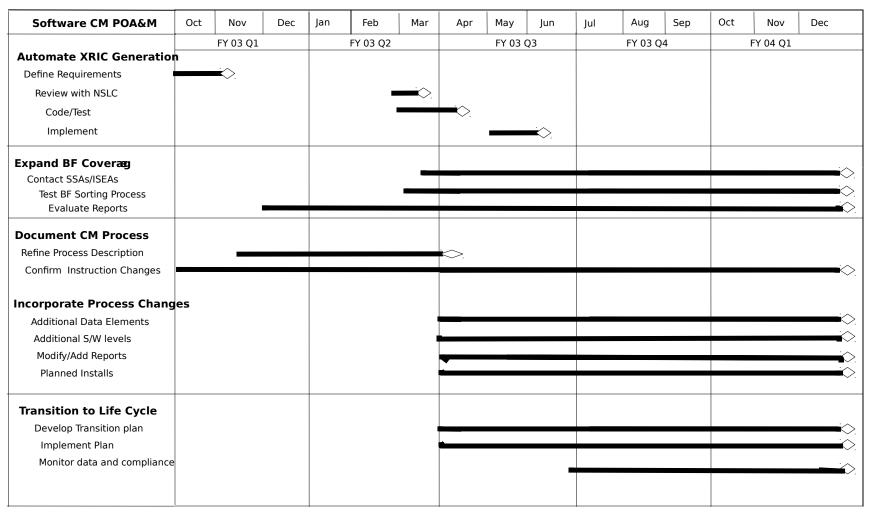


### **FUTURE PLANS**

- Automate XRIC generation process
- Continue to incorporate NAVICP RICs
- Expand Battle Force / System Coverage
- Document software CM process NAVSEANOTE 4130
- Transition to life cycle process



## POA&M





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# BACK UP SLIDES



## PROTOTYPE SYSTEMS/SHI

System	CVN 71		CG 72	DDG 61	DDG 71	DD 969	DD 997	FFG 55	SSN 761	SSN 768	AOE 4	LHD 5	LPD 12	LSD 41
TAG MI( 00	SNAP I	SNAP II	SNAP II	OPTIMIZED	OPTIMIZED	X X	SNAP II X	SNAP II	OPTIMIZED	OPTIMIZED	SNAP II X	SNAPI	OPTIMIZED	SNAP II
TAS MK 23						^	^				^	.,		
AN/SPS-48E	Х											Х		
CIFF (UPX-29)		Х	Х	Х	Х									Х
AUTO ID	Х													
SYS-2 IADT	Х							Х				Х		
AN/SYQ-17 RAIDS						Х	Х	Χ						
MK 92								Х						
NSSMS MK 57	Χ					Х	Χ					Х		
RAM MK 31												Х		
CIWS MK 15	Х	Х	Х	Х	Х	Х	Х	Х			Х	Х	Х	Х
AN/SQQ-89		Χ	Χ	Х	Х	Х	Х	Х						
CV-TSC SQQ-34	Χ													
AN/TPX-42(V)	Χ											Х		
AWS		Х	Х	Х	Х									
RADDS/ASDS	Х							Χ			Х	Х	Х	Х
CDS/ACDS BLK 0/1	Х					Х	Х	Х				Х		
SSDS MK1/2														Х
GCCS-M	Χ	Χ	Χ	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
C2P	Χ	Χ	Χ	Х	Х									
SGS/AC	Х	Х	Х	Х	Х							Х		
AN/SLQ-32(V)	Х	Х	Х	Х	Х	Х	Х	Х			Х	Х	Х	Х
NAVSSI	X(blk3)	X (blk2)	X(blk2)		X(blk3)	X (blk2)	X (blk2)							
AN/WSN-7 (RLGN)	Х	Х	Х		Х									
BFTT			Х											Х



## DATA ELEMENTS

- RIC XRIC used for software
  - XSFT00 + assigned number
  - Tab A RIC NM = Software Version ID
  - Tab B EIN = Software Version ID
  - TAB C SW:(software Version ID):(narrative)
- EIN Software version number SAC SWFTR
- NHA EIN of parent hardware
  DISCPL V
- PRID Media SSRC N
- SN Serial Number of media DISI A
- P RIC Parent Hardware RIC
- P SN Serial Number of Parent Hardware
- EFD Parent system and software ID

#### SEA0 4L5/SPM/PARM

- Define S/W Configuration Management Process
- Develop and implement prototype process
- Submit SRS for required CDMD-OA changes
- Develop and promulgate guidance for S/W CM process
- Measure effectiveness

#### ISEAs/SSAs/SPM/PARM

- Define software configurations
- Generate Work Files containing required S/W data
- Measure effectiveness

#### CDMs/SPM/PARM

- Review and validate the Work Files
- Upload the Work Files
- Measure effectiveness